

Overweight: Perception of the Community in Mukim Sepang, Selangor

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ABSTRACT

Overweight is defined as abnormal fat accumulation that linked with poor body image. Misperceptions of weight status and practicing unhealthy weight control are generally seen with involvement of health risk behaviours and negligence of physical activity. Therefore, this study aims to identify the perception towards overweight among community in Mukim Sepang.

A cross-sectional study was conducted with a universal sampling method. The study was conducted via a face-to-face interview using a standardized questionnaire. The data was analyzed using SPSS (Statistical Package for Social Sciences) Version 20.0.

Forty percent of the respondents have fear towards overweight, 31.7% did not have willpower in losing weight and 22.1% have dislike perception towards overweight people. High prevalence of fear perception could be seen among female and private sector staffs, however willpower is their challenges.

In conclusion, overweight may resulted from a lack of willpower and the best treatment is to practice healthy lifestyle as it is associated with a significant decrease in mortality.

Key Word: Testicular Self-Examination, Awareness, Knowledge, Attitude, Practice

INTRODUCTION

In 2010, there are estimated 3.4 million deaths resulting from overweight and obesity, with 3.9% of years of life lost, and 3.8% of disability-adjusted life-years (DALYs) worldwide. [1] Overweight and obesity are defined as abnormal or excessive fat accumulation that may impair health [2] and it has been linked with poor body image. [3] Meanwhile, body image refers to a person's emotional attitudes, beliefs and

perceptions of their own body, and a positive body image means that one is happy about the way one looks and feel good about one's body.

Haff [4] proposes that misperceptions of weight status and practicing unhealthy weight control are generally seen with lower self-esteem, depression, involvement of health risk behaviours, and negligence of physical activity in most people. Ranil, et al. [5] in their study reports a number of 85% overweight patients regard themselves to be of 'normal weight' or even 'underweight', 36% of obese respondents misperceive body weight as being of 'normal weight' while 10.9% consider themselves to be 'underweight'.

The important components in weight loss and healthy eating habits are self-perceived of health and weight appropriateness. [6] Therefore, the perception of physical appearance predicts the physical activity level of an individual. [7] Around 16.1% agrees that obesity is related to laziness and 5.5% feels like it is a result of lack of control in food consumption. [5]

Rajadurai, et al. [8] report that as low as 4% of respondents perceive obesity as one of the risk factors for obtaining cardiovascular disease. This result is considered as highly mortifying as there are still many people who are overweight or even obese that tend to underestimate their high risk for getting obesity related diseases. Subsequently, in order to develop stigma-reduction interventions, perception towards overweight and knowledge of common views in the general public as well as in specific populations is crucial and vastly important. [9]

Thus, this study was conducted to study the perception towards overweight among the community in Sepang so as to help the community in term of improving their knowledge on the hazards of being overweight. This will eventually benefit and hopefully aid health authorities in organising suitable intervention programs targeted to reduce the risks of having chronic diseases in relation to overweight.

MATERIALS AND METHODS

A cross-sectional study was done in Kawasan Perumahan Murah, Taman Sri Sepang, and Selangor. This residency comprises of one storey terrace houses with the total number of 190 multiracial residents. All Malaysian residents aged at least 15 years old and live in the residency for at least six months were included in this survey, which used universal sampling method. The exclusion criteria were residents with mentally retarded, physically disabled and deaf.

Data has been collected through a face to face interview, using a set of questionnaire, which comprises of socio-demography characteristic and validated Anti-Fat Attitudes Questionnaire (AFA). [9] The AFA questionnaire collect information related to dislike ($\alpha=0.88$) (7 questions), fear of fat ($\alpha=0.88$) (3 questions) and willpower ($\alpha=0.72$) (3 questions). Dislike is perception of the participants towards fat individuals; fear of fat is perception when the participants becoming fat and willpower is becoming overweight due to lack of willpower in losing weight.

The body mass index (BMI), was calculated and classified based on Clinical Practice Guideline (CPG) on primary & secondary prevention of cardiovascular diseases (CPG, 2017) into Normal (BMI <23) and Overweight / Obese (BMI \geq 23). [10]

The sum of scores for each subscale was calculated and divided by the total number of questions. Every agree answerscored0, whereas score 1 for disagree answer. Value above 0.5 indicates agreed to

perception for dislike, fear and willpower. Data has been analysed using Statistical Package for the Social Sciences data analysis software (SPSS version 23.0).

RESULT

A total of 104 respondents participated in the study with response rate of 54.7%. Majority of respondents were male (58%), 60 years old (27.9%), Indian (47.1%), married (59.6%), had secondary education (52%) and household income range of RM1000-1999 (32.7%).

Table1. Perception towards overweight among respondents (N=104)

Perception	Disagree		Agree	
	n	%	n	%
Dislike	81	77.9	23	22.1
Fear	62	59.6	42	40.4
Willpower	71	68.3	33	31.7

Forty percent of the respondents have fear towards overweight, 31.7% did not believe in willpower in losing weight and 22.1% have dislike perception towards overweight individuals (Table 1).

Table 2 showed that majority of female respondents have dislike perception towards overweight individuals (65.2%) and did not believe that willpower can help people to lose weight (72.7%), compared to male respondents (34.8% and 27.3%, respectively). However, majority of male respondents fear in becoming overweight compared to female respondents (52.7% and 47.6%, respectively).

Respondents who were more than 60 years old have the highest (52.2%) dislike perception compared to fear in becoming overweight (31%). Adult at the age of 30-39 years have more fear of becoming overweight, whereas 27.3% of respondents in the age group of 40-49 years old believed that willpower did not help people in losing weight.

Majority of respondents with tertiary education, working in private sector and single have fear of becoming overweight (11.9%, 28.6% and 21.5%, respectively).

Table2. Agreed perception towards overweight by socio-demographic data

Socio-demography	Perception		
	Dislike (N=23)	Fear (N=42)	Willpower (N=33)
	n (%)	n (%)	n (%)
Gender			
Male	8 (34.8)	22 (52.4)	9 (27.3)
Female	15 (65.2)	20 (47.6)	24 (72.7)
Age			
15-19	1 (4.3)	3 (7.1)	2 (6.1)
20-29	2 (8.7)	4 (9.5)	5 (15.2)
30-39	0 (0)	8 (19.0)	4 (12.1)
40-49	5 (21.7)	7 (16.7)	9 (27.3)
50-59	3 (13.0)	7 (16.7)	6 (18.2)
=>60	12 (52.2)	13 (31.0)	7 (21.2)
Race			
Malay	4 (17.4)	7 (17.0)	4 (12.1)
Chinese	4 (17.4)	17 (41.5)	12 (36.4)
Indian	15 (65.2)	17 (41.5)	17 (51.5)
Education level			
Non Formal Education	2 (8.7)	5 (11.9)	2 (6.1)
Primary	8 (34.8)	12 (28.6)	10 (30.3)
Secondary	12 (52.2)	20 (47.6)	18 (54.5)
Tertiary	1 (4.3)	5 (11.9)	3 (9.1)
Marital Status			
Single	3 (13.0)	9 (21.5)	6 (18.2)
Married	15 (65.2)	25 (59.5)	22 (66.7)
Widowed/ Divorced	5 (21.7)	8 (19.0)	5 (15.2)
Occupation			
Government Employee	1 (4.3)	1 (2.4)	1 (3.0)
Private Employee	4 (17.4)	12 (28.6)	13 (39.4)
Self-Employed	0 (0)	6 (14.3)	4 (12.1)
Retiree	8 (34.9)	7 (16.7)	3 (9.1)
Unpaid Worker	5 (21.7)	9 (21.4)	4 (12.1)
Homemaker	4 (17.4)	5 (11.9)	7 (21.2)
Student	1 (4.3)	2 (4.8)	1 (3.0)
TOTAL	23 (100)	42 (100)	33 (100)

Table3. Perception towards overweight by gender

Perception	N	Mean	SD	t	df	Sig.
Dislike						
Male	44	0.32	0.209	0.452	102	0.653
Female	60	0.30	0.259			
Fear						
Male	44	0.52	0.396	-1.502	102	0.136
Female	60	0.64	0.385			
Willpower						
Male	44	0.77	0.265	2.352	102	0.021
Female	60	0.62	0.333			

Table 3 showed there was no significant difference in the average scores of dislike perception towards overweight individuals for male (M=0.32, SD=0.209) and female (M=0.30, SD=0.259), $t(102)=0.45$, $p=0.653$. There was also no significance difference in the average score of fear perception of becoming overweight between male (M=0.52, SD=0.396) and

female (M=0.64, SD=0.385), $t(102)=-1.50$, $p=0.136$. However, there was significance difference in the average score of willpower between male (M=0.77, SD=0.265) and female (M=0.62, SD=0.333), $t(102)=2.35$, $p=0.021$.

Table4. Responses on perception (N=104)

Statement	Responses		
	Agree	Disagree	P value
	n (%)	n (%)	
DISLIKE			
Few of your friends are overweight or obese.	73 (70)	31(30)	0.000
If you were an employer, you might avoid hiring an overweight person	33(32)	71(68)	0.000
Fat people make you somewhat uncomfortable.	28(27)	76(73)	0.000
You dislike people who are overweight or obese.	27(26)	77(74)	0.000
You tend to think that people who are overweight are a little trustworthy.	22(21)	82(79)	0.000
Although some overweight people must be intelligent, generally you think they tend not to be.	21(20)	83(80)	0.000
You have hard time taking overweight people too seriously.	21(20)	83(80)	0.000
FEAR			
You worry about becoming fat.	65(63)	39(38)	0.011
One of the worst things that could happen to you would be if you gained 10kgs	63(61)	41(39)	0.031
You feel disgusted with myself when you gain weight	56(54)	48(46)	0.433
WILLPOWER			
People who weigh too much could lose at least some part of their weight through little exercise.	86(83)	18(17)	0.000
It is people's own fault if they are overweight.	72(69)	32(31)	0.000
Some people are overweight because they have no willpower	55(53)	49(47)	0.556

Table 4 showed 70% of respondents agreed that few of their friends are overweight or obese and 26% of them dislike people who are overweight or obese. Twenty seven percent perceived that fat people make them uncomfortable and about 32% respondents agreed that if they were an employer, they might avoid hiring an overweight person. Generally, there was proportion difference in dislike perception towards overweight individuals between agree and disagree responses ($p<0.05$).

Majority (63%) of respondents, worry of becoming fat and 54% feeling disgusted when they gain weight. Generally, there was proportion difference in fear of

perception becoming overweight between agree and disagree responses ($p < 0.05$)

Table 4 also showed that respondents perceived it is people's own fault if they are overweight (69%) and because they have no willpower (53%).

Table 5. Association between perception and BMI status

Perception	BMI status		TOTAL	P value
	< 23 n (%)	≥ 23 n (%)		
Dislike				
Disagree	20 (35.8)	52 (64.2)	81 (100)	0.624
Agree	8 (34.8)	15 (65.2)	23 (100)	
Fear				
Disagree	15 (24.2)	47 (75.8)	62 (100)	0.009
Agree	21 (50.0)	21 (50.0)	42 (100)	
Willpower				
Disagree	26 (36.6)	45 (63.4)	71 (100)	0.704
Agree	11 (33.3)	22 (66.7)	33 (100)	

Among respondents who dislike overweight and have no willpower to lose weight, 65.2% and 66.7%, respectively have high BMI status. However, statistically there were no significant association between perception of dislike towards overweight or willpower towards overweight and BMI status ($p > 0.05$) (Table 5).

Among respondents who did not fear of becoming overweight, 75.8% have high BMI status and it was associated significantly ($p < 0.05$).

DISCUSSION

Dislike perception is a perception of the participants towards fat individuals. [11] Perception towards overweight and knowledge of common views in the general public as well as in specific populations is crucial and vastly important, [12] as misperceptions of weight status are generally seen with involvement of health risk behaviours. [4]

About 22.1% of our respondents dislike towards individual who are overweight and 65% were female respondents. It might be due to females do not prefer an overweight body as stated by Khor et al [13] which 58.3% females want a smaller body size, compared to 49.1% of males who prefer a larger body size. Kamaria et al [14] in their study also show

that 48.1% of females dissatisfied with their body shape and want to become slimmer, in contrast to males, who desire to become heavier (44.1%). This is also consistent with Debra et al. [15] and our study that show female respondents were fear of becoming fat and are more disgust toward obesity compared to male.

However, in spite of not satisfied with their current body shape and 90.5% females perceive themselves as being overweight, [6] majority of our female respondents have no willpower to lose weight, which causes them becoming overweight. Women thought that most people become overweight due to their own choices, as showed by Ismawati et al. [16] which they agreed having difficulty to eat healthy foods at shops/ restaurants (55.8%) and do not have time to prepare and eat healthy food (51.1%).

Majority of our teenagers' respondents (93.9%) believed that having willpower is important in attempting to lose weight and this was supported by Hisar & Toruner [17] which state 33% of adolescents had tried or were trying to lose weight, indicating that they actually believe in the effectiveness of willpower in losing weight Teenagers are more likely to have negative perception towards body image as proven by Kuan et al., [18] where more than half of the males (53.5%) and females (54.1%) with normal BMI placed themselves in the weight categories that were not in accordance to their actual BMIs, thus leading these group of people into trying to achieve their desired body shapes. This result is also consistent with our finding which majority of them have fear on becoming fat.

However, the teenagers showed less dislike towards obese people, inconsistent with Flint et al. [19] which respondents at the age of 18 to 25 year olds have more negative attitudes, with greater anti-fat attitudes and greater fat phobia towards obese people ($P < 0.01$) than 26–50 year olds. Janine, et al. [20] shows 84% of population at the age of 61-80 years old have a low

negative attitude towards overweight individuals. This is also not consistent with our findings where majority of respondents at the age of 60 years old (52%) and retiree (34.9%) have dislike perception towards overweight people. Twenty seven percent of our respondents perceived that fat people make them uncomfortable and this negative image accompanies by sadness, shame and isolation among obese people. [21]

A study done by Chew et al. [22] shown that 95% of Chinese respondents have perception that food consumption influences obesity in a person. Our study showed 63.6% of Chinese respondents believed that willpower helps people in losing weight. This indicated that they believed most people are overweight due to lack of diet control and they think that willpower in controlling diet is one of the keys in losing weight.

Being obese also means they will face diminished prospects for a normal life as an obese job applicant is less likely to be hired than a normal-weight applicant with identical qualifications. Katrin et al. [23] in their study show 42% of human resource professionals disqualified the obese female when asked whom of the six displayed individuals they would absolutely not hire, which is consistent with our finding where 32% of the respondents will avoid hiring an overweight person if they were to be an employer, as they thought the obese employees are less conscientious, agreeable, emotionally stable, and extraverted than normal-weight colleagues. [24] Even if the obese candidate is hired, he or she is less likely to be promoted and receive a raise, as obese candidates are perceived to be significantly less competent than non-obese candidates, [25] which are also consistent with our result where 20% perceived that overweight people were not intelligent.

Obesity increases the risk of illnesses such as coronary artery disease, diabetes mellitus, hypertension, sleep apnea, and several types of cancer. [26,27] It is also a major financial strain on both individuals and society, with the direct annual medical

costs estimated to be in excess of \$147 billion dollars. [28] Therefore, apart from the extra medical cost to employers, a cost that ranges from an additional \$400 to \$2,000 a year for each full-time obese employee, fat also burdens companies with extra costs in the form of absenteeism, reduced performance, workers' compensation and disability claims, and premature death. [29] These might be the reason of our private sector workers respondents, feared of becoming fat.

Our study showed among respondents who have no willpower, majority were at least overweight. Willpower is not only among the weakest of mental forces, but in most people it actually fatigues with continued use. [30] In 2011, 27% of Stress in America survey respondents report that lack of willpower is the most significant barrier to change. [31] Another study done in America, among 1,509 adults, three-quarters of survey participants said obesity resulted from a lack of willpower and the best treatment, is to diet and exercise. [32] Healthy lifestyle habits are associated with a significant decrease in mortality regardless of baseline body mass index. [33]

Limitations of this study were the small, non-probability sample size and language barrier where most of the respondents were Indian and Chinese while the researchers were Malay. However, researchers did ask help from some Chinese and Indian people to communicate with the non-Malay respondents.

Thus we would like to suggest a larger sample size with homogenous population for future studies which in turn will increase power of the study analysis and accuracy of the results. Translating the questionnaires into the respondents' native languages also could help to reduce language barriers.

CONCLUSION

There was higher prevalence of perception on fear towards overweight and it was statistically associated with overweight. However, the perception on

willpower among the respondents in Taman Sri Sepang is worrying as it takes willpower to get in shape and stay healthy.

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